UUU UUU	UUU UUU			PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	\$	YYY YYY
UUU UUU	UUU UUU	EEE		PPF PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	SSSSSSSSSSS SSS	YYY YYY
UUU	UUU	EEE	111	PPP PPP		YYY YYY
UUU	ŬŬŬ	ĔĔĔ	ήήή	PPP PPP		YYY YYY
ŬŬŬ	ŬŬŬ	ĔĔĔ	ΪŤ	PPP PPP		'''YYY YYY'''
ŬŬŬ	ŬŬŬ	ĔĔĔ	ŤŤŤ	PPP PPP		ÝÝÝ ÝÝÝ
UUU	UUU	ÉEÉ	TTT	PPP PPP		YYY YYY
UUU	UUU	EEEEEEEEEE	TTT	PPPPPPPPPPP	SSSSSSSS	YYY
UUU	UUU	EEEEEEEEEE	TTT	PPPPPPPPPPP	SSSSSSSS	YYY
UUU	UUU	EEEEEEEEEEE	ŢŢŢ	PPPPPPPPPPP	SSSSSSSS	YYY
UUU	UUU	EEE	ŢŢŢ	PPP	SSS	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY
UUU	UUU	EEE	TTT	PPP	SSS	YYY
	JUUUUUUUU	EEEEEEEEEEEEE	TTT	PPP	SSSSSSSSSS	YYY
	UUUUUUUU	EEEEEEEEEEEEE	TTT	PPP	SSSSSSSSSS	YYY
UUUUUUU	JUUUUUUUU	EEEEEEEEEEEEE	TTT	PPP	SSSSSSSSSS	YYY

\$	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	\$	\$	\$	888888 888888 88 88 88 88	333333 333333 33 33 33 33 33 33 33 33 3
LL LL LL LL LL LL LL LL LL LL LL LL LLLL		\$					

SATSSS83 Table of contents	B 11 SATS SYSTEM SERVICE TESTS \$SETSWM (SUCC 16-SEP-1984 01:06:07 VAX/VMS Macro V04-00	Page	0
(1) 56 (1) 86 (1) 112 (1) 175 (1) 245 (1) 338 (1) 420	DECLARATIONS CONDITION TABLES TM_SETUP, TM_CLEANUP CONDITION SUBROUTINES - SETUP AND CLEANUP FORM_CONDS VERIFY VFY_CLEANUP		

S

.TITLE SATSSSB3 SATS SYSTEM SERVICE TESTS \$SETSWM (SUCC S.C.)

COPYRIGHT (c) 1978, 1980, 1982, 1984 BY DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS. ALL RIGHTS RESERVED.

THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS TRANSFERRED.

THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT CORPORATION.

DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.

FACILITY: SYSTST (SATS SYSTEM SERVICE TESTS)

ABSTRACT:

; *

: *

; *

THIS MODULE CONTAINS SUBROUTINES WHICH, WHEN LINKED WITH SUCCOMMON.OBJ, FORM TEST MODULE SATSSSB TO TEST SUCCESSFUL OPERATION OF THE \$SETSWM SYSTEM SERVICE. THE SERVICE IS INVOKED UNDER VARIOUS INPUT CONDITIONS WITH VARYING INPUT PARAMETERS. ONLY SUCCESSFUL STATUS CODES ARE EXPECTED IN THIS TEST MODULE. CORRECT OPERATION OF THE SERVICE FOR EACH OF ITS ISSUANCES IS VERIFIED BY CHECKING FOR AN SS\$ NORMAL STATUS CODE, EXPECTED RETURN ARGUMENTS AND EXPECTED FUNCTIONALITY PERFORMED.

ENVIRONMENT: USER MODE IMAGE; NEEDS CMKRNL PRIVILEGE, DYNAMICALLY ACQUIRES OTHER PRIVILEGES, AS NEEDED.

AUTHOR: THOMAS L. CAFARELLA, CREATION DATE: JUL, 1977

MODIFIED BY:

V03-001 KDM0002 Kathleen D. Morse 28-Jun-1982 Added \$SSDEF.

ŎŎŎŎ 0000 0000

```
D 11
SATS SYSTEM SERVICE TESTS $SETSWM (SUCC 16-SEP-1984 01:06:07 VAX/VMS Macro V04-00 Page DECLARATIONS 5-SEP-1984 04:34:00 [UETPSY.SRC]SATSSS83.MAR;1
                                                                                                                                                       (1)
                   0000
0000
0000
0000
0000
0000
0000
0000
                                      .SBTTL DECLARATIONS
                                                                                      ; PRIVILEGE BIT DEFINITIONS
; PROCESS HEADER OFFSETS
; SYSTEM STATUS CODES
                         EQUATED SYMBOLS:
        0000
        ŎŎŎŎ
```

SATS SYSTEM SERVICE TESTS \$SETSWM (SUCC 16-SEP-1984 01:06:07 VAX/VMS Macro V04-00 Page 4 DECLARATIONS 5-SEP-1984 04:34:00 [UETPSY.SRC]SATSSS85.MAR;1 (1)

00000000 81 .PSECT RWDATA,RD,WRT,NOEXE,LONG
00000008 0000 82 PRIVMASK: .BLKQ 1 .BVTE SS\$_WASCLR, - : EXPECTED .SS\$_WASSET :... STATUS CODES

0000000

110

```
SATS SYSTEM SERVICE TESTS $SETSWM (SUCC 16-SEP-1984 01:06:07 VAX/VMS Macro V04-00 CONDITION TABLES 5-SEP-1984 04:34:00 [UETPSY.SRC]SATSS83.MAR;1
                                                                                                                                         Page
              A000
A000
                         86
87
88
89
                                         .SBTTL CONDITION TABLES
              AOOO
                                         **** CONDITION TABLES FOR SETSWM SYSTEM SERVICE ****
              000A
                         90
91
              AOOO
                                                    1,LONG, <SWPFLG>, -

<SWAPPING DISABLED>, -
                                         COND
              AOOO
              000A
                         923
93
95
96
97
98
                                                       <SWAPPING ENABLED>,-
              AOOO
              003D
0041
0045
0045
0000000
                                                                                       ; DISABLED ; ENABLED
                                                           .LONG
00000001
                                                           .LONG
                                                    2, NOTARG, <PREVIOUS SWAP MODE>, -
<SWAPPING PREVIOUSLY DISABLED>, -
                                         COND
              0045
                         99
                                                       <SWAPPING PREVIOUSLY ENABLED>,-
              0045
                        100
              009A
                        101
00000000
                                                          .LONG
                                                                                       : DISABLED : ENABLED
              009E
00A2
00A2
00A3
                        102
103 ;
104
00000001
                                                          .LONG
                                         COND
                                                    3, NULL
                        105
              00A3
                        106
                                         COND
                                                    4, NULL
              00A4
                        107
              00A4
                        108
                                         COND
                                                    5, NULL
                        109
              00A5
```

.PSECT SATSSS83,RD,WRT,EXE

(1)

```
SATSSS83
V04-000
```

0000000'EF

03

00

0057

167

PRIV

ADD, ALL

: GET ALL PRIVILEGES

```
SATS SYSTEM SERVICE TESTS $SETSWM (SUCC 16-SEP-1984 01:06:07 VAX/VMS Macro V04-00 TM_SETUP, TM_CLEANUP 5-SEP-1984 04:34:00 [UETPSY.SRC]SATSS83.MAR;1
                                                                                                                                             (1)
                            0000
                                    112
                                                   .SBTTL TM_SETUP, TM_CLEANUP
                            ŎŎŎŎ
                            ŎŎŎŎ
                                    114
                                         ; FUNCTIONAL DESCRIPTION:
                            0000
                                    115
                            ŎŎŎŎ
                                    116
117
                                                             TM_SETUP AND TM_CLEANUP ARE CALLED TO PERFORM
                            ŎŎŎŎ
                                            REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
                            0000
                                    118
                                           TEST MODULE EXECUTION.
                            ŎŎŎŎ
                                     119
                            0000
                                    12234567890
1231234567890
                                         : CALLING SEQUENCE:
                            0000
                            0000
                                                   BSBW TM_SETUP
                                                                       BSBW TM_CLEANUP
                            0000
                            0000
                                           INPUT PARAMETERS:
                            0000
                            0000
                                                   NONE
                            0000
                            0000
                                           IMPLICIT INPUTS:
                            0000
                            0000
                                                   NONE
                                    131
132
133
134
135
                            0000
                            0000
                                           OUTPUT PARAMETERS:
                            0000
                            0000
                                                   NONE
                            0000
                            0000
                                    136
                                           IMPLICIT OUTPUTS:
                                    137
                            0000
                                    138
                            0000
                                                   TM_SETUP: COND TABLE INDEX REGISTERS (R2.3.4.5.6) CLEARED:
                                    139
                            0000
                                                                ALL PRIVILEGES ACQUIRED.
                            0000
                                    140
                            0000
                                    141
                                           COMPLETION CODES:
                                    142
                            0000
                            0000
                                                   EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                            0000
                                    144
                            0000
                                    145
                                           SIDE EFFECTS:
                                    146
                            0000
                            0000
                                    147
                                                   SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                            0000
                                    148
                                                   (VIA RSB) IF ERROR ENCOUNTERED.
                            0000
                                    149
                                    150 ;--
                            0000
                            0000
                                    151
                            0000
                                    152
                            0000
                                    153
                            0000
                                    154 TM_SETUP::
                                    155
156
                            0000
                                                   CLRL
                53
53
55
56
                                                                                             INITIALIZE
                            0002
                       D4
                                                   CLRL
                                                                                             .. CONDITION
                       D4
                            0004
                                    157
                                                   CLRL
                                                             R4
                                                                                             .... TABLE
                       04
                            0006
                                    158
                                                             R5
                                                   CLRL
                                                                                             ..... INDEX
                      D4
30
                            0008
                                    159
                                                   CLRL
                                                             R6
                                                                                                       REGISTERS
                                                            MOD_MSG_PRINT ; PRINT TEST MODULE BEGIN MSG
TEST_MOD_SUCC_TMD_ADDR ; ASSUME END MSG WILL SHOW SUCCESS
#SUCCESS.#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
                            000A
                                    160
                                                   BSBW
      0000000'EF
                       DE
                            000D
                                    161
                                                   MOVAL
     0000000 * 8F
                            0018
                                    162
                                                   INSV
      00000000'EF
                            0020
                            0025
                                                             TO.5%, KRNL
##CTL$GL_PHD,R9
                                     163
                                                   MODE
                                                                                            KERNEL MODE TO ACCESS PHD
     0000000°9F
                       00
                            0048
                                    164
                                                   MOVL
                                                                                            GET PROCESS HEADER ADDRESS
                                                             PHDSQ_PRIVMSK(R9) , PRIVMASK ; GET PRIV MASK ADDRESS
00000000'EF 69
                       DE
                            004F
                                    165
                                                   MOVAL
                            0056
                                                   MODE
                                                             FROM, 5$ : BACK TO USER MODE
                                     166
```

SATSSS83 V04-000

ÕŠ

00B2

I 11
SATS SYSTEM SERVICE TESTS \$SETSWM (SUCC 16-SEP-1984 01:06:07 VAX/VMS Macro V04-00 TM_SETUP, TM_CLEANUP 5-SEP-1984 04:34:00 [UETPSY.SRC]SATSS83.MAR;1 Page 7 (1) \$SETPRN_S TEST_MOD_NAME_D
SS_CHECK_NORMAL
RSB
TTO RSB
TTM_CLEANUP::
BSBW__MOD_MSG_PRINT
RSB 0077 0084 : SET PROCESS NAME : CHECK STATUS CODE RETURNED FROM SETPRN : RETURN TO MAIN ROUTINE 05 OOAE OOAF 30 ; PRINT TEST MODULE END MSG ; RETURN TO MAIN ROUTINE FF4E' ÖÖAF

```
CONDITION SUBROUTINES - SETUP AND CLEANU 5-SEP-1984 04:34:00
                                                                                      [UETPSY.SRC]SATSSS83.MAR:1
                                 .SBTTL CONDITION SUBROUTINES - SETUP AND CLEANUP
      00B3
00B3
00B3
                176 :++
177 : FI
                     : FUNCTIONAL DESCRIPTION:
                178
                        CONDX AND CONDX CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
      00B3
                179
      00B3
00B3
00B3
00B3
                180
                181
                        ROUTINE IN SUCCOMMON. MAR). ANY SETUP FUNCTION PARTICULAR TO THE
                        CONDITION X TABLE IS INCLUDED IN THE CONDX SUBROUTINE AND CLEANED
                        UP, IF NECESSARY, IN THE CONDX CLEANUP SUBROUTINE. THIS INCLUDES, ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
       00B3
                184
       00B3
                185
                        OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
      188
                        (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
                189
                190
                     : CALLING SEQUENCE:
                191
                192
                                 BSBW CONDX BSBW CONDX_CLEANUP
                193
                                   WHERE X = 1, 2, 3, 4, 5
                194
                195
                     : INPUT PARAMETERS:
                196
                197
                                 CONFLICT = 0
                198
                199
                     : IMPLICIT INPUTS:
                200
201
202
                                 R2.3.4.5.6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                                   FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
      00B3
      00B3
                        OUTPUT PARAMETERS:
                205
206
207
208
      00B3
      00B3
                                 CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
      00B3
      00B3
                     : IMPLICIT OUTPUTS:
                209
210
      00B3
      00B3
                                 R2,3,4,5,6 PRESERVED
                211
212
      00B3
      00B3
                        COMPLETION CODES:
      00B3
      00B3
                                 NONE
                215
      0083
               216 : SIDE E
217 :
218 :
219 :
220 :--
221 :
222 :
223 :
224 COND1 ::
225 :
226 COND1 CI
      00B3
                     : SIDE EFFECTS:
      0083
      00B3
00B3
00B3
                                 NONE
      00B3
      00B3
      00B3
      00B3
00B3
 05
                                                                             : RETURN TO MAIN ROUTINE
                                 RSB
                226 COND1_CLEANUP::
227 RSB
228 COND2::
229 RSB
230 COND2_CLEANUP::
231 RSB
      00B4
 05
      00B4
                                                                             ; RETURN TO MAIN ROUTINE
       00B5
 05
      0085
                                                                             : RETURN TO MAIN ROUTINE
       00B6
 05
      00B6
                                                                             : RETURN TO MAIN ROUTINE
```

SATS SYSTEM SERVICE TESTS \$SETSWM (SUCC 16-SEP-1984 01:06:07 VAX/VMS Macro V04-00

(1)

K 11
SATS SYSTEM SERVICE TESTS \$SETSWM (SUCC 16-SEP-1984 01:06:07 VAX/VMS Macro V04-00 Page 9 CONDITION SUBROUTINES - SETUP AND CLEANU 5-SEP-1984 04:34:00 [UETPSY.SRC]SATSSS83.MAR;1 (1)

	00B7 00B7	232 COND3::	
05	00B7	RSB 234 COND3_CLEANUP:: 235 RSB	; RETURN TO MAIN ROUTINE
05	00B8 00B8	234 COND3_CLEANUP::	. DETUGAL TO MAIN COUTING
UJ	0089	236 COND4::	; RETURN TO MAIN ROUTINE
05	00B9	277 pcp	: RETURN TO MAIN ROUTINE
	OOBA	238 COND4_CLEANUP::	
05	OOBA	239 RSB 240 COND5::	; RETURN TO MAIN ROUTINE
05	00BB 00BB	240 (UND):: 241 RSR	: RETURN TO MAIN ROUTINE
•	OOBC	241 RSB 242 COND5_CLEANUP:: 243 RSB	, RETORN TO THAT ROOTINE
05	OOBC	243 RSB	; RETURN TO MAIN ROUTINE

```
SATSSS83
V04-000
```

```
SATS SYSTEM SERVICE TESTS SSETSWM (SUCC 16-SEP-1984 01:06:07 VAX/VMS Macro V04-00 FORM_CONDS S-SEP-1984 04:34:00 [UETPSY.SRC]SATSSS83.
                                                                                                                                                                                                                                          LUETPSY.SRCJSATSSS83.MAR;1
                                                                                                                                                                                                                                                                                                                                     (1)
                                                                                                         2444890123
2444455555
55
                                                                                                                                         .SBTTL FORM_CONDS
                                                                                        OOBD
                                                                                        OOBD
                                                                                                                    : FUNCTIONAL DESCRIPTION:
                                                                                        00BD
                                                                                        00BD
                                                                                                                                                             FORM_CONDS FORMATS AND PRINTS INFORMATION ABOUT
                                                                                        00BD
                                                                                                                           THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
                                                                                        OOBD
                                                                                                                         CALLING SEQUENCE:
                                                                                        00BD
                                                                                        OOBD
                                                                                                                                        BSBW FORM_CONDS
                                                                                        OOBD
                                                                                        00BD
                                                                                                                        INPUT PARAMETERS:
                                                                                        OOBD
                                                                                        OOBD
                                                                                                                                        NONE
                                                                                        OOBD
                                                                                        OOBD
                                                                                                                        IMPLICIT INPUTS:
                                                                                                          261
262
263
                                                                                        OOBD
                                                                                                                                         R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                                                                                        00BD
                                                                                                                                             FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                                                                                        OOBD
                                                                                                                                        FOR X = 1.2.3.4.5
                                                                                        OOBD
                                                                                                                                                             CONDX_T - TITLE TEXT FOR CONDX TABLE
                                                                                        00BD
                                                                                                                                                             CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE
                                                                                        00BD
                                                                                                                                                             CONDX_C - CONTEXT OF THE CONDX TABLE
                                                                                        OOBD
                                                                                        OOBD
                                                                                                                                                             CONDX = - DATA ELEMENTS OF THE CONDX TABLE
                                                                                        00BD
                                                                                        OOBD
                                                                                                                        OUTPUT PARAMETERS:
                                                                                        OOBD
                                                                                        00BD
                                                                                                                                        NONE
                                                                                                        272 : NONE
273 : IMPLICIT OL
275 : NONE
276 : NONE
277 : COMPLETION
279 : NONE
281 : SIDE EFFECT
283 : NONE
285 : --
287 : SIDE EFFECT
288 : SIDE EFFECT
288 : SIDE EFFECT
288 : NONE
289 : SIDE EFFECT
288 : NONE
289 : SIDE EFFECT
288 : NONE
289 : NONE
281 : SIDE EFFECT
288 : NONE
289 : NONE
280 : NONE
281 : SIDE EFFECT
288 : NONE
289 : NONE
280 : NONE
281 : NONE
281 : NONE
281 : NONE
281 : NONE
282 : NONE
283 : NONE
284 : NONE
285 : NONE
286 : NONE
287 : NONE
287 : NONE
288 : NONE
289 : NONE
280 : NONE
281 : NONE
281 : NONE
281 : NONE
281 : NONE
282 : NONE
283 : NONE
284 : NONE
285 : NONE
286 : NONE
287 : NONE
287 : NONE
288 : NONE
289 : NONE
280 : NONE
281 : NONE
282 : NONE
283 : NONE
284 : NONE
285 : NONE
286 : NONE
287 : NONE
287 : NONE
287 : NONE
288 : NONE
289 : NONE
280 : NONE
281 : NONE
282 : NONE
283 : NONE
285 : NONE
286 : NONE
287 : NONE
287 : NONE
287 : NONE
288 : NONE
289 : NONE
280 : NONE
280 : NONE
281 : NONE
282 : NONE
283 : NONE
285 : NONE
286 : NONE
287 : NONE
288 : NONE
288 : NONE
289 : NONE
280 : NONE
                                                                                        OOBD
                                                                                        OOBD
                                                                                                                        IMPLICIT OUTPUTS:
                                                                                        00BD
                                                                                        00BD
                                                                                        00BD
                                                                                        OOBD
                                                                                                                        COMPLETION CODES:
                                                                                        OOBD
                                                                                        OOBD
                                                                                        OOBD
                                                                                        OOBD
                                                                                                                        SIDE EFFECTS:
                                                                                        00BD
                                                                                        00BD
                                                                                        00BD
                                                                                        00BD
                                                                                        OOBD
                                                                                        OOBD
                                                                                        OOBD
                                                                                        OOBD
                                                                                        00BD
                                                                                                                                        $FAO_S MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
                                                                                        OODC
                                                                                                                                                                                                                               FORMAT CONDITIONS HEADER MSG
                                                                                       00DC
00DF
00E2
                                                                             30
91
12
31
                                                           FF21'
                                                                                                                                                             OUTPUT MSG
                                                                                                                                                                                                                                          AND PRINT IT
                                                    14
                                                                04
                                                                                                                                                             #COND1 C , #NULL
                                                                                                                                                                                                                                IS CONDITION 1 NULL ?
                                                                 03
                                                                                                                                        BNEQU
                                                                                                                                                             10$
                                                                                                                                                                                                                                NO -- CONTINUE
                                                           00CB
                                                                                        00E4
                                                                                                                                                             FORM_CONDSX
                                                                                                                                                                                                                                YES -- SUBROUTINE IS FINISHED
                                                                                       00E7
                                                                                                                                                            COND1_TABER2],MSG_B
#CONDT_C,MSG_CTXT
     0000000'EF
                                         0000000A'EF
                                                                                                                                         MOVAL
                                                                                                                                                                                                                                SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
                                   00000012'EF42
                                                                             D0
90
0000000°EF
                                                                                       00F2
                                                                                                                                                                                                                                SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
                                                                                                                                                                                                                                SAVE CONDITION 1 CONTEXT FOR FAO
                            0000000'EF
                                                                                        OOFE
                                                                                                                                         MOV_VAL COND1_C,CONDT_E[R2],MSG_DATA1 ; GIVE COND 1 DATA VALUE TO FAO
                                                                                        0105
```

: RETURN TO CALLER

RSB

SATS SYSTEM SERVICE TESTS \$SETSWM (SUCC 16-SEP-1984 01:06:07 VAX/VMS Macro V04-00 Page 12 VERIFY 5-SEP-1984 04:34:00 [UETPSY.SRC]SATSSS83.MAR;1 (1)

.SBTTL VERIFY

: FUNCTIONAL DESCRIPTION:

01B3

01B3

01B3

01B3

01B3

0183 0183

01B3

01B3

0183

0183

01B3

01B3

01B3

01B3

01B3

01B3

01B3

01B3

0183

01B3

01B3

01B3

01B3 01B3

01B3

01B3

0183 0183 0183

01B3

01B3

01B3 01B3

01B3

01B3

0183

0183

0183

0183

01B3

0183

01B3

01B3

0183

01B3

0183

0183

339 340

351 352 353

354

355

356

357

358

359

360

361

362

364

365

366

367

369 370

377

380

381

385 386

387 388

389

390

391 392 393

394

383 :

363 :

VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE (\$SETSWM). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY, THROUGH THE SS CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO, PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER. WHEN ERR EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED, AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.

CALLING SEQUENCE:

BSBW VERIFY

: INPUT PARAMETERS:

NONE

: IMPLICIT INPUTS:

R2.3.4.5.6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES

FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.

FOR X = 1,2,3,4,5:

CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX

TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE

ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM

FOR CONDX_E.

OUTPUT PARAMETERS:

NONE

: IMPLICIT OUTPUTS:

VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS, IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED ERRORS.

COMPLETION CODES:

EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.

: SIDE EFFECTS:

SS CHECK AND ERR EXIT MACROS CAUSE PREMATURE EXIT (VIA RSB) IF ERROR ENCOUNTERED.

S

; RETURN TO CALLER

418

RSB

```
C 12
SATS SYSTEM SERVICE TESTS $SETSWM (SUCC 16-SEP-1984 01:06:07 VAX/VMS Macro V04-00 VFY_CLEANUP 5-SEP-1984 04:34:00 [UETPSY.SRC]SATSSS83.MAR;1
                                                                                                                                                                                              Page
                                                                                                                                                                                                           (1)
                         01234567890123456789
222222223333333333333
                                                   .SBTTL VFY_CLEANUP
           ; FUNCTIONAL DESCRIPTION:
                                    VFY CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY CLEANUP MUST ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN ERROR IS FOUND). ALSO, VFY CLEANUP MAY ISSUE SS CHECK OR ERR EXIT ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED IN THE EVENT THAT VFY CLEANUP IS CALLED DURING ERROR PROCESSING, WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN POSSIBLY DISCOVERING A SECOND ERROR
                                      POSSIBLY DISCOVERING A SECOND ERROR.
                                     CALLING SEQUENCE:
                                                  BSBW VFY_CLEANUP
                                     INPUT PARAMETERS:
                                                  NONE
                         440
                         441
                                      IMPLICIT INPUTS:
                                                  R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.

FOR X = 1,2,3,4,5:

CONDX E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX

TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE

ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
                                                                       FOR CONDX_E.
                         450
451
452
453
           0246
                                     OUTPUT PARAMETERS:
           0246
           0246
                                                  NONE
                         454
455
456
457
           0246
           0246
                                     IMPLICIT OUTPUTS:
           0246
0246
0246
0246
0246
                                                  NONE
                         458
459
                                      COMPLETION CODES:
                         460
          461
                                                  EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                         462 463
                                     SIDE EFFECTS:
                         464
                                                  SS CHECK AND ERR EXIT MACROS CAUSE PREMATURE EXIT (VIA RSB) IF ERROR ENCOUNTERED.
                         465
                         466
                         467
                         468
                         469
                         472
                                 VFY_CLEANUP::
                                                                                                                    ; MAKE SURE SWAPPING IS ENABLED
                                                  SSETSWM_S #1
                         474
                                                  RSB
                                                                                                                     : RETURN TO CALLER
```

0250

.END

```
D 12
SATS SYSTEM SERVICE TESTS $SETSWM (SUCC 16-SEP-1984 01:06:07 VAX/VMS Macro V04-00 Page 15
5-SEP-1984 04:34:00 [UETPSY.SRC]SATSSS83.MAR;1 (1)
SATSSS83
Symbol table
                                                                                                                                                             (1)
                                                                      MOD_MSG_CODE
MOD_MSG_PRINT
MSGT_INP_CTL
MSG3_ERR_CTL
MSG_A
MSG_B
MSG_CTXT
MSG_DATA1
NOTARG
                                      = 00000202 R
= 00000028
$$$$
                                                           04
$$$CHARS
                                                                                                                                 04
02
02
                                                                                                               ******
$$$CHARS1
                                      = 00000010
                                                                                                               00000019 R
$$$CHARS2
$$$CHARS3
                                      = 0000001B
                                                                                                               00000039 RG
                                     = 00000000
                                                                                                                                 04
$$$CHAR$4
                                    = 00000000
                                                                                                               ******
                                                                                                                                 Ŏ4
$$$CHARS5
                                    = 00000000
                                                                                                               ******
                                                                                                                                 04
SSSCOND A
                                   = 00000001
                                                                                                               *******
                                                                                                                                 04
SSSSTRINGS
                                   = 00000001
                                                                                                            = 00000000
                                                                                                                           G
$$$STRINGS2
                                   = 00000005
                                                                                                            = 00000014 G
                                                                       NULL
$$T2
                                                                       OUTPUT_MSG
PCV
                                    = 00000004
                                                                                                                                 04
                                                                                                               ******
BYTE
                                      = 00000001
                                                                                                               ******
                                                                                                                                 04
                                                                       PHDSQ PRIVMSK
                                                                                                            = 00000000
CFLAG
                                                     X
                                        *****
CHMRTN
                                        ******
                                                                       PRIVMASK
                                                           04
                                                                                                               00000000 R
                                                                                                                                 03
                                                                      PRIV ARGS
PROCESS ERR
CHM CONT
                                        *****
                                                           04
                                                                                                            = 00000002
COMP SC
                                        *****
                                                                                                                                 04
                                                                                                               *****
CONDT
                                        000000B3 RG
                                                                       QUAD
                                                                                                            = 00000008 G
COND1 C
                                      = 00000004
                                                                       RECV
                                                                                                                                 04
                                                                                                              *****
                                                                      REST_REGS
SAVE_REGS
SS$_NORMAL
SS$_WASCLR
SS$_WASSET
STATCODES
COND1_CLEANUP
                                        000000B4 RG
                                                                                                               ******
                                                                                                                            X
                                                                                                                                 04
COND1_E
                                        0000003D R
                                                           03
                                                                                                               *****
                                                                                                                            X
                                                                                                                                 04
COND1 H
                                        00000011 RG
                                                           Ŏ3
                                                                                                            = 00000001
COND1 T
                                        0000000A R
                                                           ŎŽ
                                                                                                            = 00000001
COND1_TAB
                                        00000012 R
000000B5 RG
                                                           03
                                                                                                            = 00000009
                                                           04
                                                                                                                                 03
                                                                                                               00000008 R
COND2_C
                                    = 00000000
                                                                       SUCCESS
                                                                                                               *****
                                                                                                                                 04
COND2_CLEANUP
COND2_E
COND2_H
COND2_T
                                        000000B6 RG
                                                                       SWPFLG
                                                                                                               0000003D R
                                                                                                                                 03
                                                           Ŏ3
                                        0000009A R
                                                                       SYS$CMKRNL
                                                                                                               ***** GX
                                                                                                                                 04
                                                           ŎŽ
                                        00000058 RG
                                                                       SYS$FAO
                                                                                                               ******
                                                                                                                                 04
                                        00000045 R
                                                           Ŏ3
                                                                       SYS$SETPRN
                                                                                                               ***** GX
COND2_TAB
                                                                                                                                 04
                                                                      SYSSSETPRV
SYSSSETSWM
                                        00000059 R
                                                           ŎŽ
                                                                                                               ***** GX
                                                                                                                                 04
                                        000000B7 RG
                                                           04
                                                                                                                                 04
COND3 C
                                      = 00000014
                                                                       TESTNUM
                                                                                                               ******
                                                                                                                                 04
                                                                      TESTNUM
TEST_MOD_NAME
TEST_MOD_NAME_D
TEST_MOD_SUCC
TMD_ADDR
TM_CLEANUP
TM_SETUP
VERIFY
COND3_CLEANUP
COND3_H
                                        000000B8 RG
                                                                                                               00000000 RG
                                                                                                                                 02
                                        000000A2 RG
                                                           03
                                                                                                              00000009 R
                                                                                                                                 02
COND3_T
                                        000000A2 R
                                                           ŎŠ
                                                                                                              ******
                                                                                                                                 04
COND3_TAB
                                        000000A2 R
                                                                                                              ******
                                                                                                                                 04
COND4
                                        000000B9 RG
                                                           04
                                                                                                              000000AF RG
                                                                                                                                 04
COND4_C
COND4_CLEANUP
COND4_H
COND4_T
                                      = 00000014
                                                                                                              00000000 RG
                                                                                                                                 04
                                                                                                              000001B3 RG
00000245 R
                                        000000BA RG
                                                                                                                                 04
                                        000000A3 RG
                                                           Ŏ3
                                                                       VERIFYX
                                                           03
                                                                      VFY_CLEANUP
WORD
                                        000000A3 R
                                                                                                              00000246 RG
COND4 TAB
                                        000000A3 R
                                                                                                            = 00000002 G
                                                                      WRITE_MSG2
                                        000000BB RG
                                                                                                              ******
CONDS C
CONDS CLEANUP
CONDS H
CONDS T
CONDS TAB
CTL$GE_PHD
                                      = 00000014
                                        ŎŎŎŎŎŎBC RG
                                                           03
03
                                        000000A4 RG
                                        000000A4 R
                                                           Ŏ3
                                        000000A4 R
                                                           04
                                        *****
                                      = 00000010 G
DESC
EFLAG
                                        *****
                                        ******
EXPV
FAO_DESC
                                        ******
FAO LEN FORM CONDS
                                        ******
                                                           04
                                        000000BD RG
FORM_CONDSX
                                        000001B2 R
                                                           04
```

LONG'

= 00000004 G

Psect synopsis!

PSECT name	Allocation	PSECT No.	Attributes
ABS . \$ABS\$ RODATA RWDATA SATSSS83	00000000 (0.) 00000000 (0.) 00000051 (81.) 000000A5 (165.) 00000250 (592.)	00 (0.) 01 (1.) 02 (2.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE NOPIC USR CON REL LCL NOSHR NOEXE RD NOWRT NOVEC LONG NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	35	00:00:00.08	00:00:00.65
Command processing	35 133	00:00:00.69	00:00:03.39
Pass 1	282	00:00:08.42	00:00:15.16
Symbol table sort	0	00:00:01.08	00:00:01.19
Pass 2	98	00:00:01.81	00:00:04.76
Symbol table output	12	00:00:00.13	00:00:00.36
Psect synopsis output	J	00:00:00.03	00:00:00.04
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	565	00:00:12.24	00:00:25.55

The working set limit was 1500 pages.
44664 bytes (88 pages) of virtual memory were used to buffer the intermediate code.
There were 40 pages of symbol table space allocated to hold 698 non-local and 14 local symbols.
475 source lines were read in Pass 1, producing 20 object records in Pass 2.
33 pages of virtual memory were used to define 24 macros.

! Macro library statistics !

Macro library name	Macros define
_\$255\$DUA28:[SHRLIB]UETP.MLB;1	9
\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	1
\$255\$DUA28:[SYSLIB]STARLET.MLB;2	11
TOTALS (all libraries)	21

1005 GETS were required to define 21 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:SATSSS83/OBJ=OBJ\$:SATSSS83 MSRC\$:SATSSS83/UPDATE=(ENH\$:SATSSS83)+EXECML\$/LIB+SHRLIB\$:UETP/LIB

0425 AH-BT13A-SE VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION CONFIDENTIAL AND PROPRIETARY

